January-December 1973—Vol. 38, No. 1 through Vol. 39, No. 6

Pipe Line Industry

Engineering, Construction, Operations of Pipe Lines and Gas Distribution Systems

1973 Annual Editorial Index

Title Author	Issue	Page
A New Age-Hardenable Pipe Steel for Arctic Service, C.H. Shelton and W.K. Abbott	April	24
Aerial System Supports Multiple Pipe Lines, Robert E. Stiles	Aug.	31
A More Stable Platform for Deep, Rough Water Pipelaying, R.J. Brown (Part 1)	Dec.	37
A New Approach to Valve Location and Control, K.E. Britain and S. Halter	Aug.	59
A New Era in Residual Fuel Oil Transport, C.S. Williams, Jr.	May	53
A New Look at NGL Measurement, D.W. Kemp	Dec.	42
A 'Systems Approach' for Plastic Pipe Packages, E.J. Escolas	March	58
A 'Quiet' Way to Break Pavement	May	63
British Products Line Crosses Seven Rivers	Jan.	62
Computerized Meter Records for Gas Distribution, R.T. Melvin	July	37
Construction Boom Continues Outside U.S. and Canada, David R. Deason	Nov.	23
Contracts Awarded for Cove Point Terminal	Oct.	21
Contractors Solving North Sea Weather, Deepwater Problems, David R. Deason	Sept.	55
Cook Inlet: Challenge to Pipe Line Technology, David R. Deason	Feb.	46
Crane/Pipe Carrier Speeds Pipe Line Stringing	April	50
Dow Uses Thinfilm for Gas Line Coating	March	49
Digital Computer Speeds Gas Dispatch Operations, M.A. Peot and J.J. Arneth	June	45
Economic Appraisal of Iran/Japan LNG Export, M. Tavana	March	61
Economics of High Btu Imported LNG, J.T. McKenna, Jr. and C.P. Buckley	Feb.	30
Electric Power Sources for Remote Locations, Robert E. Stiles	April	34
Electronic System Improves Gas Line Break Control	April	31
Emergency Control for Gas Utility Systems, E.L. Traub	Nov.	47
Engineering Preplanning: Key to Less Third-Party Damage, E.D. Golke	March	46
England's Largest Compressor Station Designed for Silence	Dec.	27
Far North Poses Stiff Valve Requirements, H.M. Childress and Y.B. Olive	Aug.	38
Feasibility and Design of Solids Pipe Lines, W.A. Hunt, R.C. Hughes and J.D. Tennant	Jan.	39
15 Developments to Watch in Pipe Line Construction	Sept.	47
Flow Computations for Field Measurement, M.L. Williams	Feb.	23
48-Inch Looping Continues on Minnesota Northwoods Trunk, David R. Deason	April	48
Fracture-Safe Design of PE Distribution Systems Part 1, J.T. Harrison and T.R. Smith	May	60
Fracture-Safe Design of PE Distribution Systems Part 2, J.T. Harrison and T.R. Smith	June	51
Gas/Air Mixture Tests Show Explosive Range of Gas	March	54
Gasunie Expands Capacity with Industrial Gas Turbines, F.L. Arvidsson, S.N. Ekman and Lars R. Ljung	Jan.	35
Gasunie Installs World's Largest Pipe Line Boosters	Sept.	66
Government Holds Key to Northern Construction Boom, David R. Deason	Aug.	27
High Water Table Complicates Holland Gas Line Construction	Nov.	39
How World's Largest Refined Products Carrier is Controlled, C. Crider	Oct.	32
High Pressure Pump Designed for Forties Field Crude Oil, T.O. Leith	July	42
How Northwest Natural Tests Gas Regulators, C.K. Nielsen	Jan.	54
How to Control Corrosion at Compressor Stations, R.E. Hodge	March	52
How to Field Test Large Gas Meters, W.B. Richardson, III	July	37
How to Get the Most from Galvanic Anodes, B. Husock	March	43
How to Get the Most from Limited Gas Supply, N.R. Taylor	Feb.	21
How to Spot Sample Flowing Natural Gas, A.P. Conn	Jan.	65
How TransCanada Optimizes Pipe Line Design/Economics T.E. Hajnal and R.M. Chychota	Sept.	59
Insulated Fuel Oil Line Heated by SECT, David R. Deason	Dec.	34
International Pipelining to Set New Records, Don E. Lambert	Jan.	27
Jungle Pipe Line Delivers Heavy Crude to Terminal	Aug.	58
Lay Barge/Ice Breaker Design for Arctic Use, R.B. Finlay	Aug.	34
LNG for Base Load Use, R.M. Preusser	June	26
LNG Provides Uninterrupted Service During Shutdown	Nov.	62
Marine Techniques Required to Lay Onshore Nigeria Line, David R. Deason	May	75
Massive Rock, Muskeg Await Westcoast Loop Contractors	Aug.	34
Meeting Federal Codes for Pressure Regulating Equipment, R.E. Kubitz	March	64
Methanol: A New Energy Source, B. Dutkiewicz	Oct.	22
Michigan Winter Construction Stresses Environment Protection	April	53
New Automatic Welder Passes Pilot Commercial Test, David R. Deason	Oct.	34
New Computer System to Control 466-Mile Ahwaz-Rey Crude Line	July	45
New Concept Improves Pig Location, Batch Separation	Jan.	57
New Concept Wraps Joint in One Minute	March	51
New Concepts to be used for Deepwater Pipe Lines, David R. Deason	June	39
New Detector Improves Gas Line Break Control, B.C. McLean	Aug.	55
New Soviet Barge will Permit Deepest-Yet Submarine Lines	Nov.	37
900,000-Barrel LNG Tanks are Designed for Safety, Robert E. Stiles	Oct.	25
Nippon Kokan Develops Internal Cleaning/Coating Machine	Jan.	51
Nomograph Aids Calculation of Torque, HP or Speed, B.W. Robertson	Dec.	30
Northern Illinois Gas Solves Regulator Noise Problems	Aug.	43
Offshore Station Measures up to 2,467,200 bopd	Nov.	30

Title Author	Issue	Page
ODOTRON: A Better Way to Measure Gas Odorants, R.E. Kutzleb	May	56
Packaged Silencing for Gas Turbine Compressors, H.G. Davis and R.T. Burrows	May	64
Peoples Gas Installs 42-Inch Chicago Distribution Mainline	March	66
Pipe Lines to Play Major Role in the Space Age, M.A. Greenwood	Sept.	43
Pioneer Diverts River to Lay Crossing Section	Nov.	58
Pollution Solution Trailer Saves Time in Emergencies	Aug.	65
Polymer Injection Expands Crude Pipe Line Capacity	Sept.	76
Portable LNG System Saves Time and Money, S.N. Stegall	April	52
Precision Boring Required on Gas Distribution Project	Sept.	73
Prestressing: A New Concept for LNG Pipe Lines, M.R. Gardner	Dec.	31
Remote Data Acquisition for Control of Gas and Oil Lines, D. Beck	April	28
Remote Interface Detection in Liquid Products Lines, G.M. Jeffares and B.H. Northen, Jr.	May	50
Role of SNG in the U.S. Energy Balance, H.R. Linden	July	23
Rule of Thumb Derivation of Basic Ultrasonic Flow Equations	Feb.	28
Russia Falls Short of Pipe Line Goals, R.E. Ebel	Nov.	33
Salute to the Pipe Line Contractors Association, David R. Deason	Jan.	29
Selection of Fire Resistant Lubrications for Gas Turbines, B.W. Ritcey	June	30
Semi-Submersible Permits Deep Water Tie-In, M. Lodge	Nov.	41
Shaped Charges Excavate Offshore Pipe Line Trench	Sept.	75
Shell Spans Mississippi with Eight-Line 'Package'	March	67
Six-Mile Cryogenic System Serves Offshore Brunei Loading Platform, David R. Deason	March	55
Sonic Flowmeter for Products Pipe Lines, S.F. Isaacs	Feb.	26
Soviet Construction Methods for Large Diameter Lines	Feb.	42
Station Designs for Arctic Pipe Line Systems, Jerry R. Dacy, et al	Dec.	23
Status Report on Six Field Automatic Welders, Robert E. Stiles	Sept.	52
Steel Inserts Replace Cast Iron Gas Mains, R.C. Gaulin	Aug.	47
Submarine Inspection Pays off in Deep Water	May	68
Submarines for Deep Water Pipelining, Robert E. Stiles	June	64
Swamp Vehicles Conquer Mud for South Texas Construction, David R. Deason	July	46
Techniques for Sampling Natural Gas, SNG & LNG, A.J. Miller	Sept.	70
Tennessee Gas Evaluates Insertion Flowmeters, R.L. Mabry, Jr.	Feb.	24
The Challenge of LNG/SNG Measurement, L.J. Kemp	July	28
The Four Phases of Explorer Pipe Line, V.T. Jones	May	44
The Gas Picture in Perspective, W.P. Woods	June	23
$13 Million LNG Facility to Serve Chicago Area	Oct.	29
TransCanada Looping Requires 7 Million Feet of Blast Holes	Jan.	33
Transco Develops Underwater Pipe Line Junction Platform, C.T. Rosebrugh	June	34
Transco Updates Houma Computer Control System	Sept.	69
Triple-Line System Includes Insulated Fuel Oil Trunk	Feb.	34
Tropospheric System to Link Ekofisk with Onshore Terminal, Robert E. Stiles	Nov.	28
Ultrasonic Device Detects Pinhole Gas/Oil Leaks	Nov.	54
Underground Storage System Provides Energy On-Tap	Oct.	27
Unique Pig Trap Handles Dual-Phase Offshore Flows	Dec.	41
Water Cannon Shows Promise for Gas Utility Trenching, L.L. Clipp	July	31
What is Being Done About Stray Current Corrosion, Dale Miller	March	41
What OSHA Means to the Pipe Line Industry, R.J. Larson	May	52
What's Ahead for Large Diameter Pipe Lines, David L. Way	June	55
What's Ahead for Liquids Pipe Line Automation, Part 1 C.T. Carter	April	25
What's Ahead for Liquids Pipe Line Automation, Part 2 C.T. Carter	May	69
What's Ahead for SNG from Liquids and Coal, G. Long	Oct.	19
Why Immediate Action is Needed to Increase U.S. Energy Supplies, G.C. Gambs	May	41
Why Southern Union Uses Plastic Pipe, D.L. Pickel	Jan.	59
World's First Museum for Pipe Line Industry	July	40

Construction projects

Title	Issue	Page
Alberta Natural Gas Joins Arctic Project Study Group	Feb.	56
Algonquin Plans $2.7 Million LNG Facilities Construction	March	73
Alyeska moving for Startup of TAPS Project Construction	Dec.	46
Arctic Constructors Named to Plan Alyeska Construction	Feb.	55
Arctic Islands Gas Line Study Group Formed	April	60
Aramco Awards $100 Million Facility Construction Contract	May	85
Arkansas-Missouri get LNG Plant Authorization	June	85
Ashland Proposes 600-Mile Canada-N.Y. Crude Trunkline	Jan.	71
Australian Government wants National Pipe Line Authority	March	68
Baltimore G&E plans $25 Million SNG Plant	Sept.	90
Basrah Expanding Iraq Crude System	Oct.	63
Bechtel Awarded Contract to Build Sumed Crude Line	Dec.	48
Big Three to Construct 47-Mile Nitrogen Line	April	56
Big Three will Construct $6 Million Twin Gas Lines	May	88
BP Tests Forties Field Pipelaying Techniques	Feb.	57
Brazil, Bolivia Studying $1 Billion Binational Line	July	56
Britain Contracts to buy Entire Frigg Gas Reserve	Sept.	57
Britain's First Oil Line Construction Underway	Aug.	68
Bury Machine for Forties Field Line	Oct.	59
Canada Expected to Order Montreal Line Construction	Dec.	51
Capline Expansion will Hike Design Capacity 38 percent	Sept.	85
C.A.T. Awarded Contract for Mid-East Oil Trunk	June	86
C.A.T. Building 60-Mile Saudi Arabia Trunkline	Oct.	57
Choctaw Equipment to Include $1 Million Tensioning Units	June	86
CIG Files $34.4 Million Construction Application	Aug.	72
Cities Service Authorized $5.3 Million Construction	Oct.	67
Cities Service Construction will Exceed $14.5 Million	Sept.	90
Cities Service Proposes $5.3 Million Construction	June	86
Colorado Interstate Proposes $13 Million New Facilities	June	82
Colorado Interstate Seeks $3.7 Million Construction OK	June	72
Columbia Gas Planning $33 Million Ohio Storage	Aug.	74
Columbia Gas Planning $2.8 Million Construction	Feb.	55
Columbia Seeks Approval for $2.4 Million Construction	Nov.	83
Consolidated Gas Proposes $31.2 Million Storage Project	July	53
Consortium Considering Yugoslav Line Financing	March	76
Construction Start Expected on 780-Mile Australia Line	June	68
Distrigas Would Build $5.3 Million Facilities	Jan.	71
Dozen Oil Firms Studying Arrowhead Line Proposal	April	55
East Coast Studying Sable Island Line	March	76
East Tennessee Plans $10 Million LNG Plant	Sept.	90
East, West Terminals Set for Ekofisk Gas and Oil	March	68
Egypt Looks to U.S. for Sumed Construction	Aug.	69
Ekofisk Gas Sale Agreement Signed	April	60
Ekofisk Platform Power Module Installed	Feb.	55
Electro-Watt Engineering Swiss, TENP Line Section	Jan.	88
El Paso Proposes $16.9 Million Construction in Three Projects	Nov.	82
El Paso Storage Project gets Temporary Approval	Dec.	51
El Paso Studying Feasibility of Trans-Alaska Gas Line	Jan.	87
El Paso Seeks FPC Approval for $1.8 Million Construction	June	79
El Paso, Transco Sign Algeria LNG Agreement	May	84
El Paso, Transco Sign Algeria LNG Agreement	July	55
Engineers Conduct Hearings on Colonial Expansion Plans	April	58
ENI, Sonatrach Plan Building Trans-Mediterranean Gas Line	Dec.	47
Entrepose Building Mammoth Pipelay Ship	Aug.	69
Entrepose wins $59.6 Million Iraq Line Expansion Contract	Nov.	83
Equitable Plans $6.9 Million West Virginia Construction	Oct.	64
56-Inch Kharg Island Oil Lines Pulled	Feb.	56
$5.6 Million Lone Star Warwink Project Begun	Nov.	86
Floods Cause Once-In-A-Century Line Breaks	July	54
Florida Gas Proposes $1.3 Million Construction	March	73
Florida Gas Proposes $3.2 Million Construction	Jan.	71

Title	Issue	Page
Florida Gas to Build $1.9 Million Facilities	Oct.	62
Fluor Awarded $5 Million Offshore Formosa Contract	March	80
Fluor to Build $25 Million Oregon Synthetic Gas Plant	March	76
Four Firms Plan Construction of $406 Million SNG Plant	April	58
FPC Approves El Paso $1.8 Million Construction	Sept.	90
FPC Approves $1.6 Million Kansas-Nebraska Project	Sept.	86
FPC Approves Revised Lone Star Application	March	72
FPC Authorizes El Paso $7.9 Million Construction	June	79
FPC Schedules Hearings on Algeria LNG Import Plans	Nov.	72
Frigg Field Development an Immediate Possibility	March	70
Garbage Disposal Trunks Studied by Japanese	Oct.	63
Group Planning Louisiana Deepwater Tanker Terminal	Oct.	57
Group Plans Constructing Gulf to Oklahoma Oil Line	Nov.	76
Hamilton will Automate Transco Compressors	Feb.	56
Horsepower Increase Planned for Argentine Crude Line	Feb.	56
Interprovincial Plans $104 Million Expansion	April	58
Iran Adding Compression on Line to Soviet Union	March	76
Irish Awarded Arkla Line Coating Contract	Jan.	87
Iron Ore Slurry Trunk Planned in Argentina	Aug.	71
Kansas-Nebraska Proposes $1.6 Million Nebraska Project	March	84
Lakehead will Install 65,000 Horsepower	May	89
Land & Marine Building Two Forth River Area Crossings	Nov.	85
London Studying Proposed $73.6 Million Oil Terminal	March	84
Lone Star Crews Building 92-Mile Oklahoma Line	Oct.	57
Lone Star Plans $40 Million 1973 Construction Budget	March	68
Lone Star Plans to Build New Oklahoma Gas Line	May	89
Lummus Awarded Contract for Jersey SNG Plant	June	79
Midwestern Proposes Compression Increase	May	89
Michigan Wisconsin Authorized $66.2 Million Construction	Nov.	81
Mississippi River Plans $7.9 Million Facilities	Jan.	68
Mississippi River Plans $27.5 Million Storage	Dec.	49
Mississippi River to Develop $7.9 Million Facility	Sept.	90
Montubi Awarded Libyan Contract	March	80
Moutain Fuel expanding Field Storage Facilities	June	86
Mountain Fuel would Build $3.2 Million Gas Facilities	March	72
Multinational Groups Studying Huge Siberian Project	July	50
Multi-Line Pipe 'Bundle' Installed at 375 Feet	Feb.	57
NEB Approves 534-Mile TransCanada Expansion	Jan.	68
Neill-Price Awarded Two Iran Contracts	June	72
Netherlands Offshore Wins Brent Field Line Contract	Nov.	83
New Pipe Laybarge for Forties Field Line	Oct.	63
New Plastic Pipe Demonstrated	June	82
Netherlands Firm Converting Ore Carrier to Pipelay Ship	Aug.	70
NGPLA Constructing Offshore Texas Line	Aug.	69
NGPLA Plans $19 Million Gas Facilities Construction	June	53
NGPLA $2.9 Million Construction Approved	June	85
Nigeria will Construct 85 Miles of Oil Lines	March	76
Nippon Pipe Line Plans Exceed 1,000 Miles	Oct.	62
NGPLA Authorized $1.4 Million Construction	Dec.	49
NGPLA Seeks $33 Million Facilities Construction Approval	May	80
Northern Natural Authorized New Compressor Facilities	June	70
Northern Natural, Cities Study Joint SNG, Pipe Line Venture	June	82
Northern Natural Planning $13.1 Million Construction	May	89
Northern Natural Plans $1.4 Million Construction	Oct.	67
Northern Natural Would Build Duluth Area Liquefaction Plant	Aug.	70
North Shore Gas Upgrading Area Distribution System	Dec.	50
Norway Studying Export of Frigg Gas To Sweden	Feb.	55
NSP Seeks $3.8 Million Construction Approval	March	68
Oklahoma Natural Plans $20 Million Construction	June	86
Okinawa Building 60-Mile Water Line	July	56
Olympic announces System Expansion	July	53
$100 Million Estimated for New Zealand Gas Line	May	85
$116 Million System Expansion Announced by Interprovincial	Jan.	88
$126 Million Off/Onshore Pennzoil Gas Line Planned	March	72
$1.5 Million Tennessee Gas Offshore Pipe Line Planned	Jan.	68
$1.4 Billion Coal Gas Project Under Study	June	68
$1.3 Billion U.S. Gas Line Studies	Sept.	82
ONG Names Contractors for Western System Line	Nov.	81
OTP Awarded Contract for Algiers Gas Line	April	55
OTP Studying Feasibility of Portugal Products Line	Feb.	56
Owens-Corning Designing Trans-Alaska Insulation	Dec.	48
Panhandle, CIG will Build $47 Million Gathering System	May	80
Panhandle Eastern Authorized $14.7 Million Construction	Aug.	70
Panhandle Eastern Plans $14.7 Million Construction	March	72
Panhandle Signs Contract for Algerian LNG Import	Nov.	86
Pennsylvania Approves Insulated Hot Fuel Oil Line	March	71
Peru Plans $250 Million Trans-Andean Crude Line	May 80	80
Petrobras, Bolivia Agree to Build 1,900 Mile Oil Line	Sept.	82
Petrobras Increasing Crude Line Capacity	July	55
Phillips Firming Plans for Ekofisk-U.K. Line	Jan.	71
Pioneer Natural begins $11 Million Expansion	Sept.	86
Placid Plans North Sea Gas Line to Germany	March	76
Price Awarded Two Contracts to Build 273 Miles of Line	May	81
Protech designed North Sea Platform Compression Systems	Nov.	86
Rocky Mountain will Build $1.6 Million Gathering Line	Nov.	83
Saipem Looping Tanzania Oil Line	Feb.	55
780-Mile Cooper Basin Line Construction to Start	Jan.	87
Shell Awards CJB $9.6 Million Contract	May	88
Sioux to Construct 160-mile Products Line	March	80
$64 Million LNG Terminal Proposed by Algonquin	Jan.	68
SoCal Budgets $86 Million for '73 Facilities Improved	June	85
Southern Natural Authorized $10.8 Million Construction	Nov.	81
Southern Natural Plans $10.8 Million Project	June	79
Southern Natural Planning $25.5 Million Expansion	Jan.	68
Soviet Pipeliners Order 490 International Tractors	Nov.	82
Soviets Order $2 Million Honeywell System Controls	Feb.	55
Soviets Place Order for French Line Pipe	April	60
Stauffer Building Wyoming Gas Line	March	71
Sudan Plans Constructing 488-Mile Products Trunk	Nov.	85
Survey Vessel to Probe North Sea Bottom	Oct.	59
Tennessee, Columbia to Build $14.8 Million Gulf Facilities	Oct.	64
Tennessee Gas Proposes $27.8 Million Construction	Feb.	57
Tennessee Gas will Build $27.8 Million Facilities	Aug.	74
Tennessee Proposes $4.8 Million Facilities	Sept.	86
Tennessee Seeks Approval for $11.4 Million Construction	June	82
Texas Eastern Planning 450-Mile Products Loop	Nov.	76
Texas Eastern Proposes $86.5 Million Expansion	Dec.	48
Texas Eastern Studies $275 Million Project	Oct.	57
Texas Eastern, Tenneco Pick LNG Import Terminal Location	March	71
Texas Gas will Increase Kentucky Storage Capacity	Oct.	67
Texoma Group will Build $91 Million Crude Line	July	51
Texoma Plans $75 Million Gulf Coast Oklahoma Line	June	68
Texoma will Construct $89.3 Million Oil Line	Nov.	72
Texoma will Construct $99 Million Crude Line	Sept.	86
TGT Proposes $6.1 Million Storage Field Construction	July	51
Thomassen Installing Waidhaus Turbines	Sept.	82
Three Contractors Named to Build Arkla Gas Line	Aug.	71
$3 Million Construction Proposed by El Paso	Dec.	49
Transco Authorized $6 Million Construction	Feb.	55
Transco Plans $78.5 Million Storage Development Project	Oct.	63
267-Mile Ashland Line Construction Underway	Sept.	90
$21 Million Southern Natural Alabama Construction Planned	March	84
$2 Billion LNG Project Underway	Sept.	83
Two Firms Seek Approval for $406 Million SNG Plant	March	72
$2.8 Million Columbia Gas Construction Authorized	Aug.	71
$2.1 Million NGPLA Construction Approved	Dec.	49
220-Mile Ekofisk Line Construction Under Way	Aug.	70
$228 Million TransCanada System Expansion Under Way	May	81
Union Gas Constructing $3.4 Million Compressor	Dec.	49
U.S. Firms Sign Soviet Pact for Siberian Gas Project	Aug.	68
Viking Marine Building $58.9 Million Laybarge	May	85
West Australia Line Survey Permit Issued	Nov.	83
Western Gear Producing 56-Inch Tension Machines	May	88
Western Mill Produces 90-Inch Pipe	June	82
Williams Brothers Building 282-Mile Saudi Arabia Line	Jan.	87
Williams Brothers Engineering Wins Yugoslav Gas Line Contract	Dec.	50
Wolverine Completes Looping	June	77
Worlds Largest SNG Plant Components	June	80

Authors

Author Title	Issue	Page
Arvidsson, F.L., Ekman, S.N. and Ljung, Lars R., Gasunie Expands Capacity with Industrial Gas Turbines	Jan.	35
Beck, D., Remote Data Acquisition for Control of Gas and Oil Lines	April	28
Britain, K.E., Halter, S., A New Approach to Valve Location and Control	Aug.	59
Brown, R.J., A More Stable Platform for Deep, Rough Water Pipelaying (Part 1)	Dec.	37
Carter, C.T., What's Ahead for Liquids Pipe Line Automation (Part 1)	April	25
Carter, C.T., What's Ahead for Liquids Pipe Line Automation (Part 2)	May	69
Childress, H.M. and Olive, Y.B., Far North Poses Stiff Valve Requirements	Aug.	38
Clipp, L.L., Water Cannon Shows Promise for Gas Utility Trenching	July	31
Conn, A.P., How to Spot Sample Flowing Natural Gas	Jan.	65
Crider, C., How World's Largest Refined Products Carrier is Controlled	Oct.	32
Dacy, Jerry R., et al, Station Designs for Arctic Pipe Line Systems	Dec.	23
Davis, H.G. and Burrows, R.T., Packaged Silencing for Gas Turbine Compressors	May	64
Deason, David R., Cook Inlet: Challenge to Pipe Line Technology	Feb.	46
Construction Boom Continues Outside U.S. and Canada	Nov.	23
Contractors Solving North Sea Weather, Deepwater Problems	Sept.	55
48-Inch Looping Continues on Minnesota Northwoods Trunk	April	48
Government Holds Key to Northern Construction Boom	Aug.	27
Insulated Fuel Oil Line Heated by SECT	Dec.	34
Marine Techniques Required to Lay Onshore Nigeria Line	May	75
New Automatic Welder Passes Pilot Commercial Test	Oct.	34
New Concepts to be Used for Deepwater Pipe Lines	June	39
Salute to the Pipe Line Contractors Association	Jan.	29
Six-Mile Cryogenic System Serves Offshore Brunei Loading Platform	March	55
Swamp Vehicles Conquer Mud for South Texas Construction	July	46
Dutkiewicz B., Methanol: A New Energy Source	Oct.	22
Ebel, R.E., Russia Falls Short of Pipe Line Goals	Nov.	33
Escolas, E.J., A 'Systems Approach' for Plastic Pipe Packages	March	58
Finlay, R.B., Lay Barge/Ice Breaker Designed for Arctic Use	Aug.	34
Gambs, G.C., Why Immediate Action is Needed to Increase U.S. Energy Supplies	May	41
Gardner, M.R., Prestressing: A New Concept for LNG Pipe Lines	Dec.	31
Gaulin, R.C., Steel Inserts Replace Cast Iron Gas Mains	Aug.	47
Golke, E.D., Engineering Preplanning: Key to Less Third-Party Damage	March	46
Greenwood, M.A., Pipe Lines to Play Major Role in the Space Age	Sept.	43
Hajnal, T.E. and Chychota, R.M., How TransCanada Optimizes Pipe Line Design/Economics	Sept.	59
Harrison, J.T. and Smith, T.R., Fracture-Safe Design of PE Distribution Systems, (Part 1)	May	60
Harrison, J.T. and Smith, T.R., Fracture-Safe Design of PE Distribution Systems, (Part 2)	June	51
Henry, L.R., Computer Processing Problems in Gas Control Measurement	April	37
Hodge, R.E., How to Control Corrosion at Compressor Stations	March	52
Hunt, W.A., Hughes, R.C. and Tennant, J.D., Feasibility and Design of Solids Pipe Lines	Jan.	39
Husock, B., How to Get the Most from Galvanic Anodes	March	43
Isaacs, S.F., Sonic Flowmeter for Products Pipe Lines	Feb.	26
Jeffares, G.M. and Northen, B.H., Jr., Remote Interface Detection in Liquids Products Lines	May	50
Jones, V.T., The Four Phases of Explorer Pipe Line	May	44
Kemp, D.W., A New Look at NGL Measurement	Dec.	42
Kemp, L.J., The Challenge of LNG/SNG Measurement	July	28
Kubitz, R.E., Meeting Federal Codes for Pressure Regulating Equipment	March	64
Kutzleb, R.E., ODOTRON: A Better Way to Measure Gas Odorants	May	56
Lambert, Don E., International Pipelining to Set New Records	Jan.	27
Larson, R.J., What OSHA Means to the Pipe Line Industry	May	52
Leith, T.O., High Pressure Pump Designed for Forties Field Crude Oil	July	42
Linden, H.R., Role of SNG in the U.S. Energy Balance	July	23
Lodge, M., Semi-Submersible Permits Deep Water Tie-In	Nov.	41
Long, G., What's Ahead for SNG from Liquids and Coal	Oct.	19
McKenna, J.T., Jr. and Buckley, C.P., Economics of High Btu Imported LNG	Feb.	30
McLean, B.C., New Detector Improves Gas Line Break Control	Aug.	55
Mabry, R.L., Jr., Tennessee Gas Evaluates Insertion Flowmeters	Feb.	24
Melvin, R.T., Computerized Meter Records for Gas Distribution	July	37
Miller, A.J., Techniques for Sampling Natural Gas SNG & LNG	Sept.	70
Miller, Dale, What is Being Done About Stray Current Corrosion	March	41
Nielsen, C.K., How Northwest Natural Tests Gas Regulators	Jan.	54
Peot, M.A. and Arneth, J.J., Digital Computer Speeds Gas Dispatch Operations	June	45
Pickel, D.L., Why Southern Union Uses Plastic Pipe	Jan.	59
Preusser, R.M., LNG for Base Load Use	June	26
Richardson, W.B., III, How to Field Test Large Gas Meters	July	37
Ritcey, B.W., Selection of Fire Resistant Lubrications for Gas Turbines	June	30
Robertson, B.W., Nomograph Aids Calculation of Torque, HP or Speed	Dec.	30
Rosebrugh, C.T., Transco Develops Underwater Pipe Line Junction Platform	June	34
Shelton, C.H. and Abbott, W.K., A New Age-Hardenable Pipe Steel for Arctic Service	April	41
Stegall, S.N, Portable LNG System Saves Time and Money	April	52
Stiles, Robert E., Aerial System Supports Multiple Pipe Lines	Aug.	31
Electric Power Sources for Remote Locations	April	34
England's Largest Compressor Station Designed for Silence	Dec.	27
900,000-barrel LNG Tanks are Designed for Safety	Oct.	25
Status Report on Six Field Automatic Welders	Sept.	52
Submarines for Deep Water Pipelining	June	64
Tropospheric System to Link Ekofisk with Onshore Terminal	Nov.	28
Tavanna, M., Economic Appraisal of Iran/Japan LNG Export	March	61
Taylor, N.R., How to Get the Most from Limited Gas Supply	Feb.	21
Traub, E.L., Emergency Control for Gas Utility Systems	Nov.	47
Way, David L., What's Ahead for Large Diameter Pipe Lines	June	55
Williams, C.S., Jr., A New Era in Residual Fuel Oil Transport	May	53
Williams, M.L., Flow Computations for Field Measurement	Feb.	23
Woods, W.P., The Gas Picture in Perspective	June	23